Notice of Allowability	Application No.	Applicant(s)
	40/624 967	KONGETAL
	10/634,867 Examiner	KONG ET AL. Art Unit
	Khanh B. Duong	2822
The MAILING DATE of this communication appears all claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this or other appropriate communica IGHTS. This application is subje	application. If not included tion will be mailed in due course. THIS
1. $\square$ This communication is responsive to <u>the amendment filed</u>	on March 12, 2007.	
2. $\boxtimes$ The allowed claim(s) is/are $\underline{13,16-22,24-33,44}$ and $\underline{47-52}$ .		
3. ⊠ Acknowledgment is made of a claim for foreign priority ur a) ⊠ All b) ☐ Some* c) ☐ None of the:		
Certified copies of the priority documents have		
2. 🛛 Certified copies of the priority documents have		
3. Copies of the certified copies of the priority do	cuments have been received in t	his national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		ply complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.	
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review ( P	TO-948) attached
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in th	ne Office action of
Identifying Indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t		
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIA FOR THE DEPOSIT OF BIOLOG	AL must be submitted. Note the GICAL MATERIAL.
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Attachment(s)		
1. Notice of References Cited (PTO-892)	5. Notice of Information	al Patent Application
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summ	
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	Paper No./Mail 7.	ndment/Comment
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛭 Examiner's State	ement of Reasons for Allowance
5. Diological material	9.	1111
		Mary Wilczewski
		Primary Examiner

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## **DETAILED ACTION**

## Response to Amendment

This Office Action is in response to the amendment filed on March 12, 2007.

Accordingly, claim 13 was amended.

Currently, claims 13, 16-22, 24-33, 44 and 47-52 remain pending.

## Allowable Subject Matter

Claims 13, 16-22, 24-33, 44 and 47-52 are allowed.

The following is an examiner's statement of reasons for allowance: none of the prior art of record, taken alone or in combination, fairly shows or suggests all the limitations as claimed.

Re claim 13, none of the prior art of record discloses the following limitations in combination with the rest of the limitations in the claim: forming a contact hole extending through the insulating layer and exposing the aluminum or aluminum alloy material of the gate pad; performing an annealing process; depositing using a sputtering process a third conductive layer formed of an indium zinc oxide (IZO) layer; and patterning the third conductive layer to form a conductive pattern directly contacting the aluminum or aluminum alloy material of the gate pad in the contact hole, wherein the sputtering process is performed at a temperature below 200° C, wherein the annealing process is performed immediately before depositing the third conductive layer.

Re claim 19, none of the prior art of record discloses the following limitations in combination with the rest of the limitations in the claim: forming a contact hole extending through the passivation layer and the gate insulating layer and exposing the aluminum or aluminum alloy material of the gate pad; depositing a third conductive layer formed of an indium

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zinc oxide (IZO) layer over the passivation layer; and patterning the third conductive layer to form a redundant gate pad directly contacting the aluminum or aluminum alloy material of the gate pad through the contact hole.

Re claim 44, none of the prior art of record discloses the following limitations in combination with the rest of the limitations in the claim: forming a contact hole extending through the insulating layer and exposing the aluminum or aluminum alloy material of the gate pad; depositing a third conductive layer formed of an indium zinc oxide (IZO) layer; and patterning the third conductive layer to form a conduction pattern directly contacting the aluminum or aluminum alloy material of the gate pad in the contact hole, further comprising, preheating the passivation layer, the silicon nitride layer and the exposed gate pad before the forming the third conductive layer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Duong whose telephone number is (571) 272-1836. The examiner can normally be reached on 10:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith, can be reached on (571) 272-2429. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**KBD** 

Mary Wilczewski Primary Examiner